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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,697	12/02/2003	Yung-Hsiang Hsu		1991

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EXAMINER

RAABE, CHRISTOPHER M

ART UNIT	PAPER NUMBER
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2879

DATE MAILED: 08/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/724,697

Applicant(s)

HSU, YUNG-HSIANG

Examiner

Christopher M. Raabe

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

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### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 1, 2006 has been entered.

2. Applicant's arguments filed May 1, 2006 have been fully considered but they are not persuasive.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 6-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horowitz (USPN 2002/0097586), in view of Ishinaga (USPN 6753653).

With regard to claim 6,

Horowitz discloses a light bulb comprising: a base (paragraph 19, and 104,102,106 of fig 1); a light emitting device having: a circuit board (122 of fig 1); a light emitting repository located on a center of the circuit board and having a plurality of light sources (120,110 of fig 1); and a

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plurality of pins connecting the circuit board to the base (170 of fig 1); and a bulb connected to the base and surrounding the light emitting device (fig 4).

Horowitz does not disclose a light reflecting plate located on the circuit board around the plurality of light sources of the light emitting repository and having an interior surface inclining outwardly at a predetermined angle and having a predetermined height, the interior surface having a linear cross section from bottom to top.

Ishinaga does disclose a light reflecting plate located on the circuit board around the plurality of light sources of the light emitting repository and having an interior surface inclining outwardly at a predetermined angle and having a predetermined height, the interior surface having a linear cross section from bottom to top (6x of fig 2), providing even lighting characteristics.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the reflecting plate of Ishinaga into the bulb of Horowitz in order to provide even lighting characteristics.

With regard to claim 7,

Horowitz discloses the light bulb, wherein the plurality of light sources are selected from a group consisting of light-emitting diode, incandescent diode, and small-scale light bulb (110 of fig 1).

With regard to claim 8,

Horowitz discloses the light bulb, wherein the light emitting device is a light selected from a group consisting of a vehicle light, an indoor light, an outdoor light, a street light, and a desk light (paragraph 19).

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With regard to claim 9,

Horowitz discloses the light bulb, wherein the bulb has a covering selected from a group consisting of a transparent covering, a fluorescent-coated material covering, and a ground material covering (paragraph 39).

With regard to claim 10,

Horowitz discloses the light bulb.

Horowitz does not disclose the interior surface.

Ishinaga does disclose a cross section of an interior surface to be two diverging straight lines (6x of fig 2), providing even lighting characteristics.

It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the reflecting plate of Ishinaga into the bulb of Horowitz in order to provide even lighting characteristics.

### ***Response to Arguments***

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

While the applicant argues that the Ishinaga reference does not teach a the interior surface having a linear cross-section extending from a top to a bottom of the light emitting repository, the examiner respectfully disagrees, and would like to point to reference 6x of fig 2. Additionally, while the applicant argues that there is not the slightest suggestion in either

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Horowitz or Ishinaga that their respective teachings may be combined as suggested by the examiner, the examiner would like to note that motivation to combine was provided in the office action sent December 29, 2005, in paragraph three of page 3 (see also column 5, lines 50-55 of Ishinaga).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Raabe whose telephone number is 571-272-8434. The examiner can normally be reached on m-f 7am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on 571-272-2457. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CR

  
**ASHOK PATEL**  
**PRIMARY EXAMINER**